9/1/01

BULK SPECIFIC GRAVITY OF COMPACTED BITUMINOUS MIXTURES USING PARAFFIN-COATED SPECIMENS AASTHO T 275 (METHOD A)

APPARATUS

- [ ] Balance
  - [ ] Suspension apparatus from center of balance pan
  - [ ] Suspension wire of smallest practical size
  - [ ] Holder and sample completely immersed
- [ ] Water Bath
  - [ ] Equipped with overflow outlet to maintain constant water level
  - [ ] Deep enough to completely immerse holder and sample
  - [ ] Water is 77 ± 2°F
  - [ ] Paraffin (Specific Gravity known)
- [ ] Room temperature is 77 ± 2°F

PROCEDURE

- [ ] Specimen dried overnight at 125 ± 5°F and weighed at 2-hour drying intervals until constant weight (Note 1) is achieved (not necessary for recently molded specimens)
- [ ] Specimen cooled to room temperature at 77 ± 9°F and weighed
- [ ] Specimen coated on all surfaces with melted paraffin sufficiently thick to seal all voids
- [ ] Specimen allowed to cool in air to room temperature at 77 ± 9°F for 30 minutes
- [ ] Specimen weighed
- [ ] Specimen immersed in water at 77 ± 2°F and weight recorded

Note 1 -- Constant weight is defined as the weight at which further drying at 125 ± 5°F does not alter the weight by more than 0.05 percent.

[ ] Bulk specific gravity is calculated correctly to three decimal places as follows:

$$\text{Bulk Specific Gravity} = \frac{A}{D-E - \frac{(D-A)}{F}}$$

where:
A = weight in grams of dry specimen in air
D = weight in grams of dry specimen plus paraffin
E = weight in grams of dry specimen plus paraffin in water
F = specific gravity of paraffin at 77 ± 2°F (use 0.9)

NA - Not Applicable
X - Requires Corrective Action
√ - Satisfactory

_____
Acceptance Technician

_____ _____
INDOT Date

Comments _____

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